AMENDMENT TO SAN FRANCISCO BAY AREA 2001 REGIONAL TRANSPORTATION PLAN

RTP STRATEGY TO INCREASE REGIONAL TRANSIT RIDERSHIP

Metropolitan Transportation Commission November 20, 2002

TCM 2 AND THE FEDERAL AIR QUALITY PLAN

The federal Clean Air Act requires regions to prepare State Implementation Plans (SIPs) to demonstrate compliance with federal ambient air quality standards. Since 1982, the Bay Area's SIP has included certain measures called transportation control measures (TCMs) to reduce automobile emissions. A total of 26 TCMs – including improved transit service and transit coordination, new carpool lanes, signal timing, freeway incident management, and increased state gas tax and bridge tolls - have been carried out to help reduce regional ground-level ozone ("smog") and are now largely completed.

The 1982 air quality plan included TCM 2, a measure intended to reduce emissions by improving the productivity of Bay Area transit systems. The emission reduction estimates in TCM 2 were based upon projections that, with the funding of productivity improvements in the 1983-87 Short Range Transit Plans of six major transit operators, regional transit ridership would increase by 15% from 1982-87. These reductions equate to a 0.4% reduction in vehicle emissions and an even smaller (0.1%) reduction in total emissions from all sources (see Figure 1).

Expected Reductions in Vehicle Emissions
With 15% Transit Ridership Increase

Total vehicle emissions vehicle emissions >99%

Reduction with 15% transit increase < 1%

Figure 1

Despite continued heavy investment in transit productivity measures, system and service expansion, and system operations, regional transit ridership, measured in terms of annual boardings, remains below the level associated with a 15% increase over the 1982-83 baseline.

The emissions reductions associated with TCM 2, however, were achieved many years ago, through a combination of TCM 2 implementation itself and through the implementation in 1990-91 of the Contingency Plan in the 1982 air quality plan. In the latter process MTC adopted sixteen "contingency" TCMs that more than compensated for

the shortfall in emissions reductions of the original ten TCMs in the 1982 Air Quality Plan, including TCM 2.

The text of TCM 2 appears in Appendix A.

FEDERAL DISTRICT COURT ORDER

The federal court has interpreted TCM 2 to mean that MTC has a separate SIP obligation to achieve a 15% transit ridership increase. The Court's Order Granting Injunctive Relief, dated July 19, 2002 (the "Order"), requires that:

- By no later than November 9, 2006, MTC shall increase regional ridership to at least 544.8 million annual boardings. This figure reflects a 15% increase over the 1982-82 baseline of 473.7 million annual boardings.
- Within six months of the date of the Order [i.e., by January 19, 2003], MTC must amend the 2001 Regional Transportation Plan (RTP) to include a section specifying how it will achieve full implementation of TCM 2. In this amendment, MTC shall identify and describe all projects it will fund as part of its strategy for achieving the required ridership increase. Each project description must include an implementation schedule, estimated costs, and expected ridership gains.

The Order further provides that if additional projects that are not in the TIP are needed to meet the ridership target, MTC must amend the TIP to ensure these projects can proceed. The Order also notes that "Because MTC contends that the RTP already contains sufficient projects to achieve the ridership increase, it should not ... be burdensome for MTC to prepare the required RTP amendment." MTC has therefore responded to the Court Order by amending the 2001 RTP to set forth the specific list of projects that are expected to contribute to full achievement of TCM 2.

MTC will appeal the judgment in the case in which the Order was issued. While the appeal is pending and the Order is in effect, MTC has prepared this report to serve as the basis for the court-mandated RTP amendment. The conclusion of this report is that the implementation of the 2001 RTP is projected to result in the achievement of the ridership increase target by 2006, and that a TIP amendment is not needed to obtain the projected ridership increase by that time.

TRANSIT RIDERSHIP AND INVESTMENT TRENDS

Transit trends in the Bay Area are quite similar to national transit trends (see Figure 2). Given the well developed Bay Area transit system, repeated studies have shown that demand-side factors such as personal choice, the state of the economy, patterns of development controlled by county and municipal governments, and the cost of gasoline exert a much more powerful influence on regional transit use and market share than supply-side funding decisions. These demand-side factors are not under the control of either MTC or the transit operators.



However, these external forces have not deterred MTC and its transit partners from making a strong and continuing regional investment in transit, which is evidenced by three different measures: size of the transit fleet, growth in revenue hours of service, and growth in the size of transit operating budgets. As shown below in Figure 3, all three of these measures of transit service and investment have grown at rates exceeding 15%, but ridership growth has not followed at the same pace due to the countervailing pressure of the factors cited above.

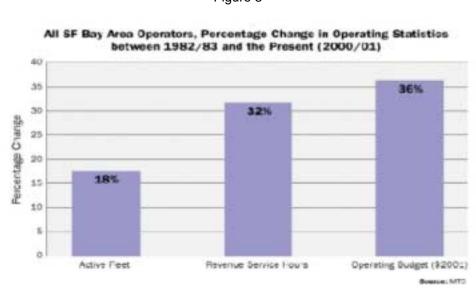
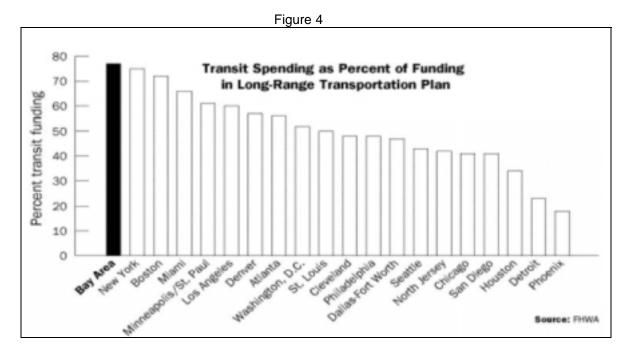


Figure 3

Further looking ahead over the next 25 years, MTC's 2001 RTP commits 77% of all projected transportation funding to public transportation. In fact, MTC's plan shows a larger percentage of transportation dollars being spent on public transportation than any

other large metropolitan area in the nation (see Figure 4). The magnitude of this share is particularly striking in light of the fact that only about 6% of daily trips are made on transit in the Bay Area.



RECENT EVENTS

Concurrent with the latest economic expansion starting in the mid-90's, Bay Area transit ridership began to grow steadily, culminating in a peak level of 533 million annual riders by the end of FY 2000/01. This represented a 12.5% increase over the FY 1982-83 TCM 2 baseline number of 473.7 million annual riders (see Figure 5). Since then, recession-related effects, exacerbated by the events following September 11, 2001, have led to fewer jobs and fewer people taking transit (and other transportation modes) for work and other trips. The Bay Area Economic Forum (BAEF) estimates that Bay Area employers shed more than 140,000 net jobs in 2001. The BAEF notes that this was the biggest loss of jobs experienced in the Bay Area in 25 years. The Association of Bay Area Governments estimates that Santa Clara County alone lost almost 43,600 jobs between 2001 and 2002.

Ridership for FY 2001/02 shows that there was a 2.6% decline from FY 2000/01, producing a regional total of 519 million riders. This figure is now 9.6% above the FY 1982/83 baseline levels. This decline in transit travel is also mirrored on the highway system, where traffic volumes have dropped as well. Caltrans' Year 2001 Bay Area Congestion Data Information Memorandum shows decreases in regional freeway travel as well, leading to an overall 12% decrease in the region's daily hours of delay. The biggest delay reductions, ranging from 40% to 75%, occurred in San Mateo and Santa Clara Counties, which were hit the hardest when high technology jobs disappeared. These freeway delay reductions have the compounding effect of making automobile use more attractive compared to often slower transit options.

Figure 5

											Sta 2001		cs							
								[Th	iousands	of Annual	Riders]									
6 Major Operators	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	Fiscal	l Year 1992/93	1993/94	1994/95	1995/96	1996/97	 ′ 1997/98	1998/99	1999/00	2000/01	2001/02
AC Transit	76,794	75,086	68,767	67,257	64,438	57,224	61,308	62,041	62,500	65,625	66,280	62,754	61,943	64,153	63,303	63,877	66,089	68,088	71,529	69,520
BART	57,700	62,792	66,036	63,270	60,304	61,160	61,738	74,761	76,193	77,247	77,626	80,183	78,952	79,593	83,446	81,422	86,488	97,024	103,919	97,146
GGBHTD	12,267	10,736	10,811	9,997	9,435	9,082	8,784	9,938	10,530	10,574	10,597	10,578	10,255	10,447	10,962	11,032	11,108	11,465	11,618	10,799
SamTrans	17,599	18,242	19,871	19,114	18,292	18,048	18,130	18,324	19,114	18,793	18,619	19,742	19,675	19,085	18,562	18,834	18,350	17,925	18,136	18,745
SF Muni	293,100*	313,100*	264,033	255,924	252,122	244,733	235,794	233,468	239,340	238,714	238,295	220,273	216,409	214,468	217,631	219,507	217,050	226,181	236,205	234,303
SCVTA	34,868	38,522	34,609	38,089	36,299	35,895	39,447	41,200	45,850	46,118	46,700	45,224	45,166	49,172	53,062	53,547	54,996	55,701	58,160	54,430
SUBTOTA	L 492,328	518,478	464,127	453,651	440,890	430,506	430,497	439,732	453,527	457,071	438,754	432,400	432,235	436,918	446,966	449,219	454,281	476,384	499,567	484,943
Other Operators																				
Caltrain	4,866	5,160	5,305	5,458	5,422	5,596	5,622	6,351	7,200	7,400	7,500	6,924	7,028	6,127	7,040	8,632	8,622	8,735	9,925	9,942
CCCTA	2,550	3,037	3,432	3,800	3,781	3,725	3,765	4,062	4,221	4,248	4,255	4,649	3,898	4,180	4,525	4,287	4,533	4,694	4,991	4,807
Vallejo	1,100	1,026	1,009	1,124	1,044	1,217	1,606	1,758	2,104	2,304	2,300	2,455	2,529	2,766	3,140	3,442	3,714	3,903	3,626	3,573
Other	1,915	2,263	2,714	2,787	2,873	3,233	4,380	5,397	6,007	6,363	6,813	6,752	6,998	7,660	8,357	9,620	11,036	12,389	14,929	15,782
SUBTOTA	L 10,431	11,486	12,460	13,169	13,120	13,771	15,373	17,568	19,532	20,315	20,868	20,780	20,453	20,733	23,062	25,981	27,905	29,721	33,471	34,104
Regional TOTAL	502,759	529,964	476,587	466,820	454,010	444,277	445,870	457,300	473,059	477,386	478,985	459,534	45 <u>2,853</u>	457,651	470,028	475,200	481,986	506,105	533,038	519,047

^{*} Muni ridership over-predicted for these years. Federal District Court has confirmed Muni's FY 1982 — 83 ridership to be 264 million.

Notes: 1) 2001/02 numbers are from individual transit operators and will be used to update the National Transit Database.

- 2) 2000/01 is latest data from National Transit Database, except for Altamont Commuter Express, Capitol Corridor, and Oakland AirBART.
- 3) FY 1988/89 to FY 1999/00 numbers are from MTC's Statistical Summary of Bay Area Transit Operators and include paratransit riders.
- 4) FY 1982/83 to FY 1987/88 numbers are from various sources, including TDA reports by operators and FTA/UMTA data.
- 5) Other includes: Alameda/Oakland Ferry, Benicia, Dixon, Healdsburg, Fairfield-Suisun, Napa Transit, Petaluma, Rio Vista, Santa Rosa, Sonoma, LAVTA, Tri-Delta, Union City, Vacaville, WestCAT, Capitol Corridor, Altamont Commuter Express, and Oakland AirBART.

MTC Graphics/pb 11/14/02

TRANSIT RIDERSHIP ESTIMATES FOR 2006

Transit ridership projections in the 2001 RTP are based upon forecasting work performed by MTC in 2000 and 2001, using MTC's state-of-the-art travel demand model known as BAYCAST. This model - or earlier versions thereof - is the same model that MTC has used and continues to use in performing approved conformity assessments of RTPs and TIPs under both federal transportation conformity regulations and previous court-approved conformity assessment procedures. The BAYCAST forecasts supporting the 2001 RTP, in turn, use demographic and economic projections developed by the Association of Bay Area Governments (ABAG). Using these forecasts and interpolating for the year 2006, one may project that regional transit ridership will reach a level of 598 million annual boardings, well in excess of the target level of 544,800,000 boardings mandated in the Order, provided that the projects and investments identified in the RTP are implemented on schedule and the underlying economic and demographic model assumptions are borne out over the next few years.

Travel demand models such as BAYCAST are most valuable in the context of longer-term planning and forecasting. They are less helpful in predicting ridership over very near-term periods, because of the speed with which the forecasting assumptions can change. Recent demographic and economic changes directly influence near-term mode choices; some forecasting variables change on a daily basis, such as gas prices at the pump. Furthermore, MTC will be required to perform a new travel demand forecast for use in the next major RTP revision, which under federal law MTC must adopt by March 2005. However, this new forecast will not be complete before the Court's January 2003 deadline for this RTP amendment.

In the absence of a planning tool such as MTC's travel demand model, it is possible to make "off-model" adjustments to long-term forecasts by making reasonable assumptions regarding the impact on travel behavior of recent events (i.e., events occurring since the last ABAG demographic and economic projections) and of reports of current trends in factors affecting transportation mode choice. Although federal law does not mandate that MTC project travel behavior (including transit usage) more frequently than once every three years, and although the Order does not specifically require MTC to engage in such an exercise, the report examines appropriate adjustments to the projections in the 2001 RTP based upon recent events and trends.

It is important to note that regional transit ridership estimates must be generated through a regional travel model, such as BAYCAST, which has been validated against observed transit operator ridership data. Such models take into account the synergies between transit operators, the impact of boarding on one system on boardings of another, and in general the regional impacts of individual projects. The ridership estimates for individual projects are at best related only indirectly to regional transit ridership, as such estimates do not take into account: (a) the impacts of an individual project on utilization of other transit services, either positive or negative, (b) the impacts of individual projects on the transportation system as a whole, and vice-versa, and (c) the regional demographic and

economic trends and other factors influencing actual and projected regional transit ridership, all of which MTC assumes in developing forecasts regarding use of the transit system on a regionwide basis. As a result, when it comes to regional transit ridership projections, there is little if any forecasting value in individual project ridership estimates.

Thus the most credible way to forecast how close regional ridership will be to the target in 2006 is to start with existing forecasts and to make reasonable adjustments to these forecasts in light of current events and very recent trendline data.

According to recent measures, the Bay Area's economy appears to be entering a slow recovery. The Bureau of Labor Statistics show that job losses in the Bay Area have slowed significantly between the 4th Quarter of 2001 and the 1st Quarter of 2002 (down from -5% to only about -0.3%). ABAG predicts that beyond 2002, economic and demographic growth will begin to return to historical rates, with net jobs growing at about 1% to 2% per year over the next few years.

Any improvements to transit service over the next few years will be "on the margin" of an already extensive transit system already in operation. This system is the product in large part of long-term planning and advocacy by MTC in previous years. Introducing new projects today, moreover, is unlikely to impact transit ridership by 2006 due to the time required to develop, fund and implement these projects. Fortunately, because of years of MTC planning and because the Governor and Bay Area voters have approved new transportation revenues, a number of transit projects will come to fruition prior to 2006 and are expected to help support further increases in ridership growth. Transit projects already in the pipeline and under construction will increase peak period transit capacity in the Bay Area by a healthy 23% by 2006, compared to the system that existed in 1998.

The result of MTC's effort to re-examine likely transit ridership levels by 2006 in light of recent events is the projection of a range of transit boardings by that year. Both ends of this range assume that the projects in the 2001 RTP are implemented on schedule.

2001 RTP Forecasts (High estimate)

The RTP forecasts prepared prior to the economic downturn most likely provide the high end of expected regional transit ridership. These forecasts used ABAG's Projections 2000 demographic data and are the forecasts that were the basis for the 2001 RTP development. The forecasts include all the transit investments to be operational by 2006. They are MTC's official forecasts until formally revised. Under the RTP forecasts, transit levels would reach 598 million annual riders in 2006. The assumptions and methodology for those forecasts are discussed in the Final Transportation Air Quality Conformity Analysis (February 2002) report for the 2001 RTP and for TIP Amendment 01-32.

<u>Adjusted Estimate (Low estimate)</u>. To account for recent dramatic changes in economic conditions and the resulting impact on transit ridership, MTC used a previously prepared 2005 travel demand forecast that, though updated from the

forecast used in preparing the 2001 RTP, still relies on ABAG Projections 2000. This forecast was modified to reflect preliminary FY 2001/02 regional transit ridership information MTC received before it obtained formal data from the transit operators. This preliminary information suggested a decline in ridership from FY 2000/01 on the order of 7%. MTC then extrapolated on a linear basis the transit ridership projection for 2005 to 2006, the year that includes the court-imposed target achievement date of November 9, 2006. These adjustments yield an alternative projection that, with the implementation of the RTP on schedule, there will be an estimated 562 million annual riders in FY 2005/06, or 6% below the high range estimate in the RTP.

These forecasts are compared in Figure 6. As shown in the chart, both forecasts exceed the court-ordered TCM 2 ridership target.

Since the "Low range" estimate was developed, MTC has obtained ridership data from the operators which demonstrates that the actual decline in ridership from FY 2000/01 to FY 2001/02 was only about 2.6% (from about 533 million boardings to about 519 million). Thus MTC continues to expect future ridership will be between the low and high range.

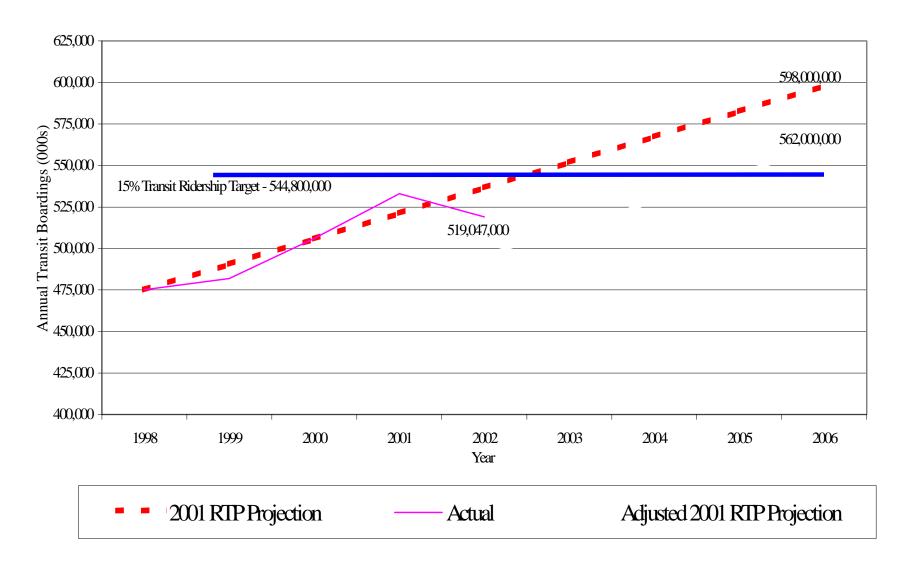
<u>DESRIPTION OF PROJECTS MTC WILL FUND AS PART OF STRATEGY TO INCREASE RIDERSHIP</u>

The Order requires MTC to identify projects it will fund to achieve the mandated 15% ridership increase.

The funding is accomplished through the federally required Transportation Improvement Program (TIP), a comprehensive listing of all Bay Area transportation projects that receive federal funds or that are subject to a federal approval. The TIP is where funds are programmed to implement the policies, projects, and programs contained in the RTP. Projects in the TIP must first be included in the RTP. Transportation improvements included in the RTP and TIP are derived from a variety of planning efforts at the city, county transit operator, regional and state levels. These include projects from county congestion management programs, countywide transportation plans, county level transportation sales tax expenditure plans, transit operator short-range transit plans, and the state highway planning process conducted by Caltrans. When a project's purpose, scope, and budget are fully developed, the project may be proposed for funding.

A draft of the 2003 TIP was released for public review and comment in May 2002. Although the TIP was ready for approval in July, MTC could not adopt it because a "Stay Order" by U.S. Court of Appeals for the Ninth Circuit suspended the U. S. Environmental Protection Agency's (EPA) approval of the motor vehicle emissions budget in the region's ozone attainment plan and caused a "conformity lapse". That budget is necessary for MTC to conform the TIP to the federal air quality plan as required by EPA's transportation air quality regulations. MTC approved an Interim 2003 TIP in October 2002 to keep as many transit projects on schedule as possible during the conformity lapse. MTC will approve a full 2003 TIP when the stay is lifted.

Figure 6
Bay Area Transit Ridership, 1998-2006



To further support these transit improvements, the TIP includes funding for a number of new and innovative programs being developed by MTC that will better serve the transit customer and make their transit trip more convenient and reliable. These include TransLink®, Regional Transit Trip Planning, Commuter Check, and ridesharing services.

Transit Projects in the TIP

Table 1 provides project descriptions, estimated costs, year of completion and expected ridership increases for selected transit projects that are in the current TIP; the table is sorted by year of project completion to show the order in which projects will be coming on line. With respect to ridership gains for individual projects, MTC does not customarily estimate ridership for each transit project and program in the Bay Area. However, this information is usually available from project sponsors, when it can be estimated. Therefore, MTC has obtained this information to the extent possible from project sponsors, and has estimated ridership for many smaller projects using reasonable planning assumptions. The ridership information, which provides the year with respect to which the ridership estimate applies, is included with the other Table 1 information.

HOV Lane Projects in the TIP

Table 2 shows the HOV lanes in the TIP that are likely to be operational by 2006. The table also shows the number of new and existing express routes that will use these programmed HOV lanes. The HOV lanes will contribute to increased transit ridership since express bus travel times will be reduced further than what they are today with the new lanes. MTC estimates that the new lanes would increase ridership approximately 6% on these express bus routes.

Other MTC Programs that Support Transit Ridership Gains

There are a number of ongoing MTC programs that support the greater use of public transit; however, it is difficult to associate specific transit ridership gains with these programs due to the diverse nature of the services and markets affected. General descriptions of these programs follow:

Transit Management Program

MTC adopted a <u>Transit Coordination Implementation Plan</u> in February 1997 to address the requirements of SB 1474. This plan puts high priority on projects that will provide improvements to passengers in the near term, benefit the largest numbers of transit users, improve productivity (which was the focus of TCM #2), and enhance the ability of transit riders to reach destinations.

- * Indicates projects whose ridership gains would not be reflected in MTC's travel demand model results and therefore would contribute additional riders to travel model-produced forecasts.
- 1 Adding numbers would not be consistent with MTC's regional transit ridership estimates, as explained in the text.
- 2 Refer to TIP for details and updates on project milestones

SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 \$)	YEAR PROJECT STARTS ¹	YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year) ²
	Line 22 Rapid Bus	Line 22 Rapid Bus Corridor:				
	Corridor; Purchase 32	Purchase 32 Buses (FTA Bus (8);				212,000
VTA	buses	CMAQ (12), STP (12))	\$24,000	2000-01	2002-03	(2004)
	Purchase 15 buses (San	Alameda County: San Pablo				3,000,000
AC Transit	Pablo Ave.)	Avenue; Purchase 15 buses	\$8,560	2002-03	2002-03	(2004)
	BART Extension to the					
	San Francisco					
	International Airport	Extend BART from Colma station				9,100,000
BART	(SFO)	to SFO and Millbrae	\$1,476,764	1998-99	2002-03	(2006)
		Puchase 2-3 expansion buses to				75,000
CCCTA	2-3 Expansion Buses	serve Bishop Ranch	\$618	2001-02	2002-03	(2003)
		Purchase 3 express buses for				
		Walnut Creek/Dublin BART to				90,000
CCCTA	3 Expansion Buses	Bishop Ranch	\$950	2001-02	2002-03	(2003)
		Martinez; Amtrak Station; New				
		Station, Parking bus bays, with				
	Martinez Amtrak Sta -	landscape, signal and crossing				50,000*
Martinez	New Sta,Pkg,landsc	improvements.	\$27,460	1999-00	2002-03	(2004)
		Contruct 100-150 space lot and				40,000*
Vacaville	Lot/Transit Station	provide for transit service	\$300	2002-03	2002-03	(2003)
		San Pablo Corridor Transit System				
		Improvements - Project includes				
	San Pablo Corridor	Street Improvements, Bus Shelters,				3,000,000
AC Transit	Transit System	and Vehicle Purchase	\$1,130	2000-01	2003-04	(2004)

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SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 \$)	YEAR PROJECT STARTS ¹	YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year) ²
BART	Pittsburg/Bay Point Parking Expand & Lighting Imps	BART: Pittsburg/Bay Point Station; Various access improvements to station including adding 300-400 additional parking places, lighting, and other access improvements.	\$4,012	2002-03	2003-04	100,000* (2004)
Caltrain	Caltrain Express/Rapid Rail	Add passing tracks, improve signaling and purchase additional rail cars; expand service	\$206,989	2000-01	2003-04	3,400,000 (2004)
Fairfield	Fairfield Transportation Center-Phase II	Fairfield: Fairfield Tranportation Center; construct approximately 180 automobile parking spaces.	\$3,053	2002-03	2003-04	30,000* (2004)
LAVTA	Purchase 4 New Buses for Expan. Service	Purchase 4 new buses for service that will provide an alternative for commuters that travel along the I-680 Sunol Corridor.	\$1,200	2003-04	2003-04	70,000 (2004)
Vacaville	Bella Vista Park and Ride Lot/Transit Station	Contruct 100-150 space lot and provide for transit service	\$1,691	2002-03	2003-04	40,000* (2004)
Vallejo	Vallejo Baylink Ferry	Vallejo: Bay link Ferry Service between Vallejo & San Francisco: Purchase 300-350 passenger vessel for the fleet.	\$10,879	2003-03	2003-04	150,000 (2004)
VTA	Zero Emission Bus Demostration Project	SCVTA: Acquire up to 6, 40 foot Low-Floor Zero Emissions expansion Buses.	\$4,093	2002-03	2003-04	225,000 (2004)

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SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 \$)	YEAR PROJECT STARTS ¹	YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year) ²
	Tasman East/Capitol Corridor Light Rail	Extends Tasman light rail line east to Milpitas and south along Capitol				2,200,000
VTA	Extension	Expressway to San Jose	\$495,218	1998-99	2003-04	(2005)
Alameda Co.	Dublin/Pleasanton BART Parking Expansion	Dublin/Pleasanton BART Station: Construct or acquire approximately 338 additional parking spaces	\$3,390	2002-03	2004-05	212,000* (2002)
BART	Fruitvale Transit Village Project	Oakland: Fruitvale BART Station; Construct a 3-5 story parking structure, new surface lots, intermodal facility, improve or replace existing surface parking & construct pedestrian plaza.	\$14,252	1999-00	2004-05	100,000* (2005)
Caltrain	Caltrain Parking Lot Improvements	Provision of approximately 100 parking spaces at various Caltrain Stations in San Mateo County.	\$1,130	2003-04	2004-05	25,000* (2005)
Fairfield	Fairfield/Vacaville Train Station	Construct new train station and parking lot for intercity rail service	\$4,575	2004-05	2005-06	160,000* (2005)
Fairfield	North Texas - Local Transfer Facility	Fairfield: North Texas Street; Construct Local bus transfer facility.	\$1,750	2002-03	2004-05	30,000* (2005)

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Fremont	Capitol Corridor Centerville Station	Capitol Corridor at Centerville Station - construct 73 space parking spaces, landscaping, sidewalks, lighting (final phase)	\$1,265	2003-04	2004-05	12,000* (2005)
Hercules	Hercules Train Station Project	Construct a Train Station along San Pablo Bay within the City of Hercules City limit	\$6,050	2003-04	2004-05	15,000* (2004)
Marin Co.	Marin Parklands Visitor Access Improvements	Expand Mazanita Park and Rideby 80 spaces/provide shuttle service to national parks	\$6,907	2003-04	2004-05	30,000* (2005)
LAVTA	Livermore Valley Center PnR Parking Structure.	Livermore: Downtown Livermore ACE train station; Construct parking structure of up to 540 spaces for transit users.	\$8,519	2002-03	2004-05	104,000* (2006)
BART	BART Richmond Station Additional Parking	Richmond: Richmond BART station; Construct an additional level on the parking structure. Project provides about 120 new parking spaces.	\$8,800	2002-03	2005-06	31,000* (2006)
BART	West Dublin Station	Add new West Dublin Station and various parking improvements	\$11,000	2004-05	2005-06	1,400,000 (2006)
Dixon	Dixon Multimodal Transportation Center	Dixon: B Street, adjacent to the UPRR Tracks; Construct building for commuter support services and future intercity rail service.	\$440	2003-04	2005-06	96,000* (2005)

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- 1 Adding numbers would not be consistent with MTC's regional transit ridership estimates, as explained in the text.
- 2 Refer to TIP for details and updates on project milestones

SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 \$)	YEAR PROJECT STARTS ¹	YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year) ²
Emeryville	Emeryville Intermodal Transfer Station: Phase 1	Emeryville: At the Emeryville Amtrak intercity rail station; Construct the first phase of the intermodal transfer station. Including a parking garage and bus terminals.	\$8,230	2003-04	2005-06	50,000* (2006)
MUNI	SF Muni Third Street LRT Extension Phase I	San Francisco: Muni; Design and construct new light rail line along the eastern side of San Francisco. Phase I.	\$860,105	2001-02	2005-06	12,500,000 (2006)
MTC/Transit Operators	Regional Express Bus Program	Purchase buses and provide operating funds to expand express bus service in selected corridors	\$40,000	2003-04	2005-06	4,900,000 (2006)
Vacaville	Commuter Buses Purchase	Vacaville: Purchase 3 over-the-road commuter coaches for service between Fairfield/Vacaville and Sacramento.	\$905	2004-05	2005-06	50,000 (2005)
VTA	Vasona Light Rail Extension	Extends light rail from San Jose Diridon station to downtown Campbell	\$342,000	2000-01	2005-06	2,300,000 (2005)

- * Indicates projects whose ridership gains would not be reflected in MTC's travel demand model results and therefore would contribute additional riders to travel model-produced forecasts.
- 1 Adding numbers would not be consistent with MTC's regional transit ridership estimates, as explained in the text.
- 2 Refer to TIP for details and updates on project milestones

SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 \$)	YEAR PROJECT STARTS ¹	YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year) ²
Vallejo	Vallejo Ferry Terminal Intermodal Facility	Vallejo: Baylink Ferry Terminal; Construct new intermodal facility, including additional parking, upgrade of bus transfer facilities, and improvement to pedestrian access.	\$25,589	2005-06	2006-07	50,000* (2006)
Sonoma County Transit	Petaluma Intermodal Transp. Center	Petaluma: Petaluma Intermodal Transportation Center On Copeland btw Washington and D street; Construct new intermodal station/transit mall.	\$1,378	2002-03	2003-04	17,000* (2006)

Table 2
Impact of Freeway HOV lanes on Regional Express Bus Ridership

impact of Free way 110 vianes on Regional Ex	press Das It	acibinp
	Number of	
	Express Bus	Peak Direction
	Routes	Travel Time
HOV Lane Project and Associated Express Bus Service	Served	Savings Range
I-80 Contra Costa - Route 4 to Carquinez Bridge (westbound only)	7	5% to 30%
I-80 Alameda - Toll Plaza to Powell (eastbound flyover)	9	19% to 31%
I-680 Alameda - Sunol Grade (northbound)	7	10% to 17%
I-680 Contra Costa- Marina Vista to Route 242	4	8% to 14%
Route 84 Alameda - Dumbarton Bridge Approach	2	17% to 21%
I-880 Alameda - Route 262 to County Line	1	3%
Route 4 Contra Costa - Railroad to Standard Oil	1	3%
Route 87 Santa Clara - Julian to Route 85	1	7%
US 101 Marin/Sonoma - San Rafael Gap Closure/Steele Ln to		
Rohnert Park	23	5% to 11%

Total Express Bus Ridership Increase: 6.1%

Two of the projects described here, TransLink® and Transit Trip Planning, are critical elements of the Transit Coordination Plan. The projects add convenience for passengers connecting between multiple operators and planning new trips on transit.

TransLink®

One of the key regional approaches for improving public transit is the development of a universal transit ticket program. The universal transit ticket program will establish a single regional system for collecting fares on all of the Bay Area's transit systems. The objectives of the program are to: 1) improve passenger convenience in making inter- and intra-agency trips; 2) improve the efficiency and security of the region's fare collection systems; 3) improve transit system data collection for service planning purposes and development of fare policies; and 4) take advantage of revenue-enhancing or cost-saving business partnerships with the private sector.

As lead agency for the TransLink[®] project, MTC is responsible for the procurement of equipment and services necessary to support an initial demonstration, evaluation of the demonstration and eventual full regional implementation. TransLink®'s demonstration phase was completed in July 2002. Full rollout among the region's largest transit agencies is expected by 2006.

Regional Transit Information System

MTC and the region's transit operators are currently developing and implementing a system of transit information services designed to make it easier for transit users to plan trips throughout the Bay Area. Currently, the general public is able to access route, schedule, and fare information on all Bay Area transit agencies at the "817-1717" regional telephone number and *transitinfo.org* web site; the regional telephone number will transition to the new nationwide "511" number in October 2002. Transit users are also able to use the internet to access TakeTransitSM, a system that provides point-to-point transit itineraries for any transit trip on or between AC Transit, ACE, BART, Caltrain, CCTA, Emery Go-Round, Muni, Union City Transit, Tri-Delta Transit, WestCat, and ferries. Over the next year, it will expand to cover all of the major transit agencies in the region

Regional Rideshare Program

The Regional Rideshare Program's objective is to provide information to the public on alternative transportation modes, such as carpools, vanpools, mass transit and other transportation alternatives. The program accomplishes this primarily by:

- Providing information about transportation alternatives to driving alone;
- Providing services through an automated ridematching system to support the use of carpools and vanpools;
- Providing information that promotes the use of carpool and Park-and-Ride facilities;
- Conducting region-wide marketing campaigns and outreach efforts to the public and employers.

Transportation for Livable Communities (TLC)/Housing Incentive Program (HIP) MTC created a special initiative called the Transportation for Livable Communities (TLC) Program in 1998 to fund and support the planning and development of small-scale transportation investments that meet community needs throughout the Bay Area. The TLC Program's primary goal is to support transportation projects that: 1) have been developed through a collaborative and inclusive planning process; 2) encourage pedestrian, transit and/or bicycle trips; 3) provide for compact development of housing, downtowns, and regional activity centers; 4) are part of a community's development or redevelopment activities; and 5) enhance a community's mobility, identify and quality of life.

Under the newly created *Housing Incentive Program*, cities and counties are eligible to receive transportation funds for capital projects when proposing housing developments adjacent to major transit service. Research has shown that residents are more likely to use public transit if they live within walking distance of a transit station. MTC acted to triple the annual funding level for the TLC/HIP programs in the 2001 RTP.

MTC Policy Initiatives that Will Help Increase Transit Ridership

MTC is on record through letters to key legislators and the Commission's legislative program supporting initiatives that will positively impact the demand for transit service, including support for:

- 1. increasing bridge tolls to \$3
- 2. peak period pricing on the San Francisco-Oakland Bay Bridge, which will shift some trips to transit; and
- 3. indexing federal and state gas taxes to produce more transportation revenues and keep the cost of transit competitive with the cost of driving.

MTC will continue to pursue these topics and their implementation over the next year.

LONGER TERM RTP INVESTMENTS

Because major transportation projects often take years to develop, it is important to also look beyond 2006 to see the larger view of the region's commitment to transit. The 2001 RTP identifies about \$68 billion in funding for transit, or about 77% of the projected \$87 billion in available transportation funding over the next 25 years; this commitment supports the 2000 Census data that shows the Bay Area has the third highest transit mode share for work trips in the nation.

The RTP includes:

- Funds to operate the existing transit system
- Funds to replace and rehabilitate the existing transit system
- A major new transit expansion program for the Bay Area (see RTEP discussion below)
- A number of miscellaneous other transit improvements (Appendix B)

The allocation of RTP funds to transit is broken down in Figure 7, which divides the \$87 billion into "Committed" funds (over which MTC has little or no discretion as to their use) and "Track 1" funds (over which MTC has considerable discretion). The pie chart in Figure 8 shows how the transit funds themselves are divided in the RTP among operating, rehabilitation and expansion needs.

Regional Transit Expansion Program – MTC Resolution No. 3434

A hallmark transportation initiative, consummated in the 2001 RTP, was the development of regional consensus on the next generation of major transit projects in the Bay Area. Known by its MTC resolution number, the Resolution 3434 agreement represents an \$11 billion program of rail and express bus projects that will be implemented over the next 25 years. Resolution No. 3434 superceded the 1988 New Rail Starts Program (MTC Resolution No. 1876) that resulted in the construction of such extensions as the BART extensions to Pittsburg/Bay Point, Dublin and the San Francisco International Airport (scheduled to open early next year), the Tasman light rail extension in Santa Clara County and the San Francisco Muni Metro light rail extension to China Basin.

The ability of an individual transit operator to provide expanded service depends on whether the operator can access funds that can be used for new guideways/vehicles and whether there is sufficient funding available to operate the new service over an extended period of time. For services described above in the Resolution 3434 section, the transit operators will have funds to operate these services. A number of Resolution 3434 projects will be implemented just beyond the 2006 deadline. A listing of the Resolution 3434 project costs, implementation year and ridership estimates are shown in Table 3

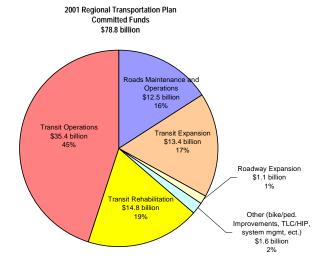
Other Track 1 Transit Investments in the RTP

In addition to the Resolution 3434 projects, there are a number of additional transit commitments in Track 1 of the RTP that are described in Appendix B. The appendix provides project descriptions, costs and estimated completion dates for RTP committed and Track 1 projects. As with the Resolution 3434 projects above, it is important to note that there are a significant number of transit projects coming on line between 2006 and 2010 that will help support increases in the region's transit ridership.

SUMMARY/CONCLUSIONS

The 2001 RTP, as implemented in the near term through the TIP, provides the foundation for achieving the court-mandated 15% ridership increase target on the schedule required in the Order.

Figure 7 2001 RTP Expenditures



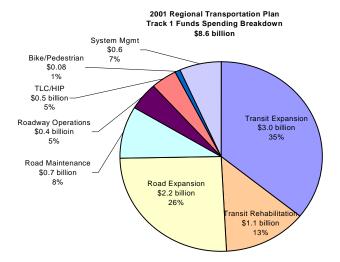
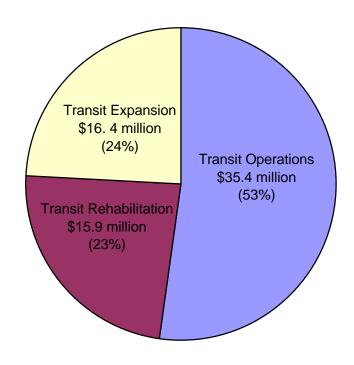


Figure 8

2001 Regional Transportation Plan Total Transit Expenditures \$67.7 billion



2001 Regional Transportation Plan Total Expenditures \$87.4 Billion

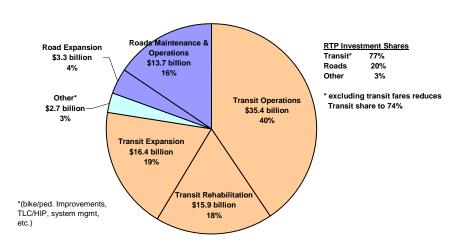


Table 3
MTC RESOLUTION No. 3434: RECOMMENDED PROGRAM OF PROJECTS

PROJECT	COST (millions of 2001 \$)	Year Operational	Annual New Riders (2020)**
BART:Fremont to San Jose	\$4,344	2012	18,180,000
MUNI Third Street Light Rail: Phase	\$647	2012	1,550,000
2-Central Subway			
BART/Oakland Airport Connector	\$232	2008	4,151,000
Caltrain Downtown	\$1,885	2010	5,662,000
Extension/Rebuilt Transbay Terminal			
Caltrain Rapid Rail/Electrification	\$602	2008	1,490,000
Caltrain Express: phase 1	\$127	2004*	3,367,000
Downtown to East Valley: Light rail	\$518	2008	2,066,000
and Bus Rapid Transit: Ph. 1&2			
Capitol Corridor: Phase 1 Expansion	\$129	2010	673,000
AC Transit Oakland/San Leandro Bus	\$151	N/A	2,487,000
Rapid Transit: Ph. 1 (Enhanced Bus)			, ,
Regional Expess Bus (Phase 1)	\$40	2004*	N/A
Dumbarton Rail	\$129	2008	328,000
BART/East Contra Costa Rail	\$345	N/A	N/A
Extension			
BART/Tri-Valley Rail Extension	\$345	N/A	N/A
Altamont Commuter Express (ACE):	\$121	N/A	N/A
service expansion			
Caltrain Express: phase 2	\$330	N/A	N/A
Capitol Corridor: Phase 2 Expansion	\$284	N/A	N/A
Sonoma-Marin Rail	\$200	N/A	550,000
AC Transit Enhanced Bus:	\$90	N/A	N/A
Hesperian/Foothill/MacArthur			
corridors			
TOTAL:	\$10,519		

N/A: Not available

Studies (outside of the RTP)

PROJECT	COST (millions of 2001 \$)
Napa/Solano Passenger Train Study	\$0.4
BART:30 th /Mission Station Study	\$0.5
TOTAL: Studies	\$0.9

^{*} Included in TIP list (Table 1)

^{**} Includes only riders that did not previously use transit for a trip; this represents a smaller subset of transit boardings that are reported in Table 1.

Appendix A

Transportation Control Measure #2

TCM #2:

Support post-1983 improvements identified in transit operator's 5-year plans, after consultation with the operators adopt ridership increase target for 1983-1987.

EMISSION REDUCTION ESTIMATES:

These emission reduction estimates are predicated on a 15% ridership increase. The actual target would be determined after consultation with the transit operators.

	1983	1984	1985	<u>1986</u>	<u>1987</u>	
HC:	0	.23	.42	.60	.72	tons/day
CO:	0	2.03	4.03	5.80	7.15	
NO _x :	0	.36	.68	.94	1.04	

COST:

Costs of maintaining the existing level of services is currently programmed in regional allocations. Ridership increases would come from productivity improvements, thus additional costs would be moderate.

IMPLEMENTATION SCHEDULE:

- o 6 major transit operators adopt FY 1983-87 plans by July, 1982
- o MTC consults with operators on ridership targets by Jan., 1983
- o MTC, through implementation of the TIP and allocation of regional funds, seeks to ensure operators' 5-year plans are implemented
- o Ridership gains are monitored through annual RFP reports

DESCRIPTION OF CONTROL MEASURE:

This measure is basically an extension of TCM #1. Since federal funds for transit purposes are being cut back, many of the improvements identified in the 5 year plans deal with increased productivity. Thus, while the size of the transit system may not grow significantly, the ridership is expected to increase.

OTHER IMPACTS

- o 31,600 gallons of gasoline saved.
- o Alternatives to automobile travel will be increased.

Appendix B

List of 2001 RTP Committed (not included in the TIP) and Track 1 Projects

2001 RTP - Committed Funding and Track 1 Investments*

ommitted		
RTP Reference Number	Project / Program	Total Project Cost
21465	Transit enhancements funded by transit center development Funds	\$2.1
21570	Livermore Valley Center Parking Structure	\$8.5
21992	AC Transit bus corridor improvements	\$20.0
94029	Altamont Commuter Express (ACE) rail service operating and station/track improvements (four roundtrips daily)	\$11.0
94524	Amtrak Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	\$66.0
rack 1		
RTP Reference Number	Project / Program	Total Project Cost
21111	Capitol Corridor mitigation for track work at Jack London Square	\$25.0
21118	MacArthur BART Station intermodal transit village (includes replacement parking)	\$100.0
21123	Union City Intermodal Station (Phase 2), includes 19 bus bays and a kiss and ride loop road	\$5.9
21131	BART-Oakland International Airport connector	\$232.0
21132	BART extension to Warm Springs	\$634.9
21136	Rapid Bus Transit (RBT) in Oakland/Berkeley/San Leandro corridor (Phase 1)	\$151.2
21138	San Leandro BART Station transit village (Phase 1); includes parking structure, kiss-and-ride and bus improvements	\$10.9
		¢4.0
21149	Express bus services	\$4.0

Contra Costa Committed RTP **Total** Reference Proiect Project / Program Number Cost 21213 Pittsburg/Bay Point BART Station parking & lighting \$2.6 improvements (400 new spaces) 94555 Capitol Corridor intercity rail service (9 round trips daily \$66.0 between Oakland and Sacramento, and 7 round trips daily between San Jose and Oakland) 94561 Transit service for elderly and disabled riders \$32.4 Track 1 RTP **Total** Reference Project Number Project / Program Cost 21207 Martinez Intermodal Terminal Facility (Phase 3 initial \$6.0 segment): 200 interim parking spaces (includes site acquisition, demolition and construction) 21208 Richmond Parkway Transit Center (Phase 1): includes signal \$15.0 reconfiguration/timing, new 700-800 space parking facility, and security improvements at Hilltop park-and-ride lot 21209 Hercules Transit Center relocation and expansion \$6.0 21211 BART/East Contra Costa Rail Extension (right-of-way \$95.0 acquisition) 94045 New express buses for I-80 HOV service (capital costs) \$16.9 98157 AC Transit enhanced bus service in San Pablo Avenue \$8.5 corridor in Contra Costa County: new passenger stations, roadway geometric improvements, information kiosks 98197 Richmond intermodal transfer station (BART to \$23.6 Amtrak/Capitol Corridor) Marin Committed

RTP Reference Number	Project / Program	Total Project Cost
98200	Sonoma-Marin Rail station site acquisitions/upgrades	\$0.6

Track 1

RTP Reference Number	Project / Program	Total Project Cost
21303	Local Marin bus service enhancements (capital only)	\$41.9
21308	Expand Manzanita park-and-ride lot	\$10.7

Napa

Committed

	RTP Reference Number	Project / Program	Total Project Cost
	94076	Trancas intermodal facility in the city of Napa	\$0.8
Track 1	!		
	RTP Reference		Total Project

RTP Reference Number	Project / Program	Total Project Cost
21402	Napa-to-Fairfield fixed-route transit (capital costs)	\$1.8

San Francisco

Committed

RTP Reference Number	Project / Program	Total Project Cost
21572	San Francisco International Airport BART extension	\$1,476.8
21573	Muni F-Embarcadero extension	\$14.4
94637	Expansion of paratransit door-to-door van and taxi service to comply with Americans With Disabilities Act (ADA)	\$61.0

Track 1

RTP Reference Number	Project / Program	Total Project Cost
21342	Caltrain Downtown Extension/TransBay Terminal Replacement	\$1,885.0
21508	Bus Rapid Transit Program	\$26.0
21509	Caltrain electrification from San Francisco to Gilroy	\$602.0

21510	Third Street Light Rail Transit extension to Chinatown (Central Subway)	\$647.0
21544	Balboa Park BART Station expansion (planning phase only)	\$2.4
an Mateo		
Committed		
RTP		Total
Reference Number	Project / Program	Project Cost
21574	San Mateo Downtown Transit Center	\$6.9
94667	SamTrans Americans With Disabilities (ADA) services	\$737.7
Track 1		
RTP		Total
Reference		Project
Number	Project / Program	Cost
21343	Caltrain Downtown Extension/Transbay Terminal Replacement	\$1,885.0
21627	Caltrain electrification from San Francisco to Gilroy	\$602.0
Committed		
RTP		Total
Reference	n ' (/n	Project
Number	Project / Program	Cost
21760	Double track Caltrain between San Jose and Gilroy	\$170.0
21770	2 such track surrain sections and surry	\$170.0
	Caltrain extension to Salinas/Monterey (capital funds)	\$36.0
21787	· ,	
21787 21790	Caltrain extension to Salinas/Monterey (capital funds)	\$36.0
	Caltrain extension to Salinas/Monterey (capital funds) Palo Alto Intermodal Transit Center (Phase I)	\$36.0 \$50.0
21790	Caltrain extension to Salinas/Monterey (capital funds) Palo Alto Intermodal Transit Center (Phase I) Altamont Commuter Express Upgrade	\$36.0 \$50.0 \$46.0
21790	Caltrain extension to Salinas/Monterey (capital funds) Palo Alto Intermodal Transit Center (Phase I) Altamont Commuter Express Upgrade Route 17 bus service improvements	\$36.0 \$50.0 \$46.0 \$2.0
21790 21797 21922	Caltrain extension to Salinas/Monterey (capital funds) Palo Alto Intermodal Transit Center (Phase I) Altamont Commuter Express Upgrade Route 17 bus service improvements San Jose International Airport connections to Guadalupe LRT	\$36.0 \$50.0 \$46.0 \$2.0 \$200.0

\$136.7 \$80.0
\$80.0
\$270.0
Total
Project
Cost
\$1,885.0
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\$66.0 7
Total
Project
Cost
\$20.0
\$5.0
\$3.5

98100	Additional express bus service on I-680 (capital costs)	\$2.1

Sonoma

Committed

RTP Reference Number	Project / Program	Total Project Cost
94167	Sonoma-Marin Rail station site acquisitions/upgrades	\$5.0